

QT-Brightek PLCC-4 Series

PLCC-4 White LED

Part No.: QBLP677A-IWD-2897

A: Common Anode

D: 50mA

2987: High Brightness Version



Table of Contents:

Introduction 3
Electrical / Optical Characteristic (Ta=25 °C) 4
Absolute Maximum Rating 4
CIE Chromaticity Diagram..... 5
Characteristic Curves..... 6
Solder Profile & Footprint..... 7
Packing 8
Labeling 9
Ordering Information 9
Revision History 10
Disclaimer 10

Introduction

Feature:

- Yellow diffused lens
- Height profile: 3.6mm
- Common anode
- Beam angle: 30 deg typ.
- MSL 3

Application:

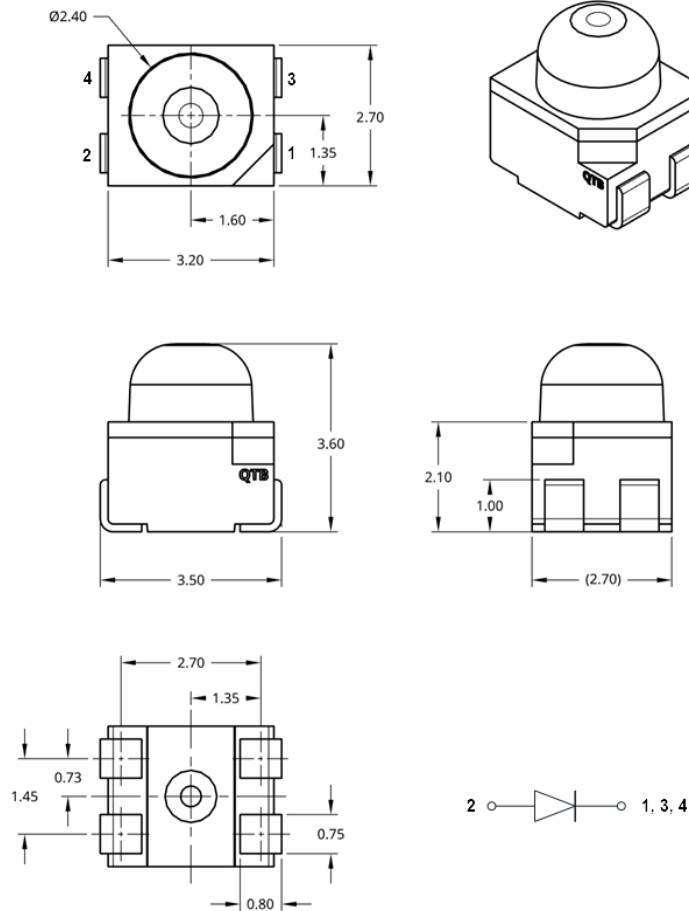
- Industrial lighting
- Industrial equipment lighting
- Transportation lighting
- Emergency lighting

Certification & Compliance:

- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.2mm

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I _F (mA)	V _F (V)			CIE Coordinate	I _V (mcd)		
			Min.	Typ.	Max.	Typ.	Min.	Typ.	Max.
QBLP677AD-IWD-2897	White	50	2.8	3.1	3.4	X=0.32 Y=0.32	14200	26000	36000

Absolute Maximum Rating

Material	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SOL} (°C)**
InGaN	204	60	150	5	-40 to +85	-40 to +100	260

*Duty 1/10 @ 1kHz

**IR Reflow for no more than 10 sec @ 260 °C

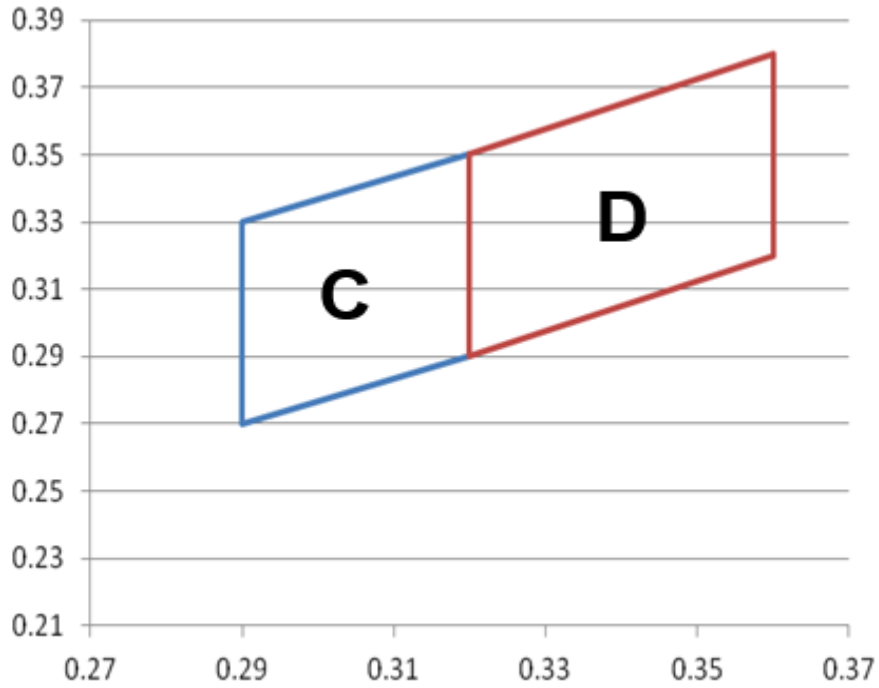
Forward Voltage V_F @ I_F=50mA

Bin	Min.	Max.	Unit
f	2.8	3.1	V
g	3.1	3.4	

Luminous Intensity @ I_F=50mA

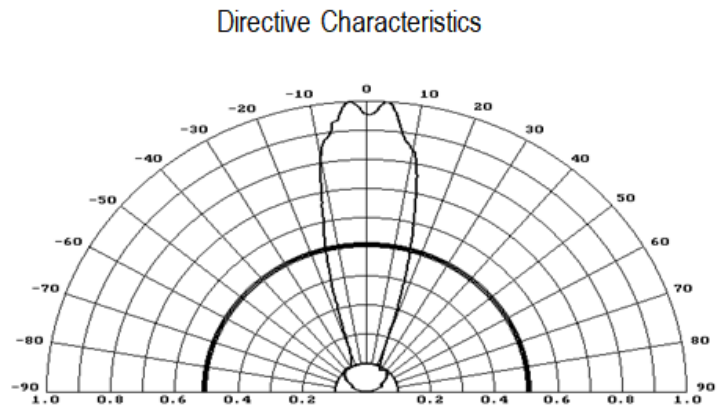
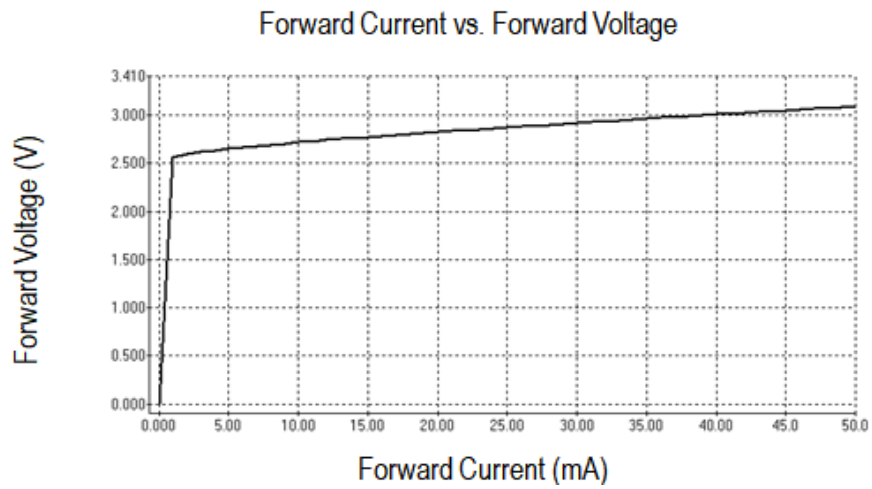
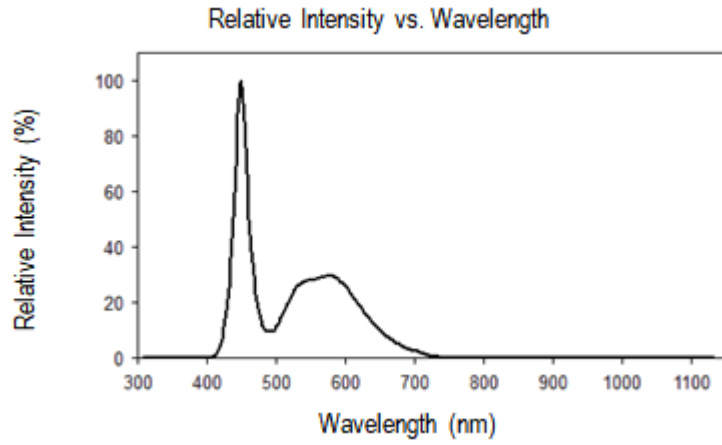
Bin	Min.	Max.	Unit
e	14200	18000	mcd
f	18000	22500	
g	22500	28500	
h	28500	36000	

CIE Chromaticity Diagram



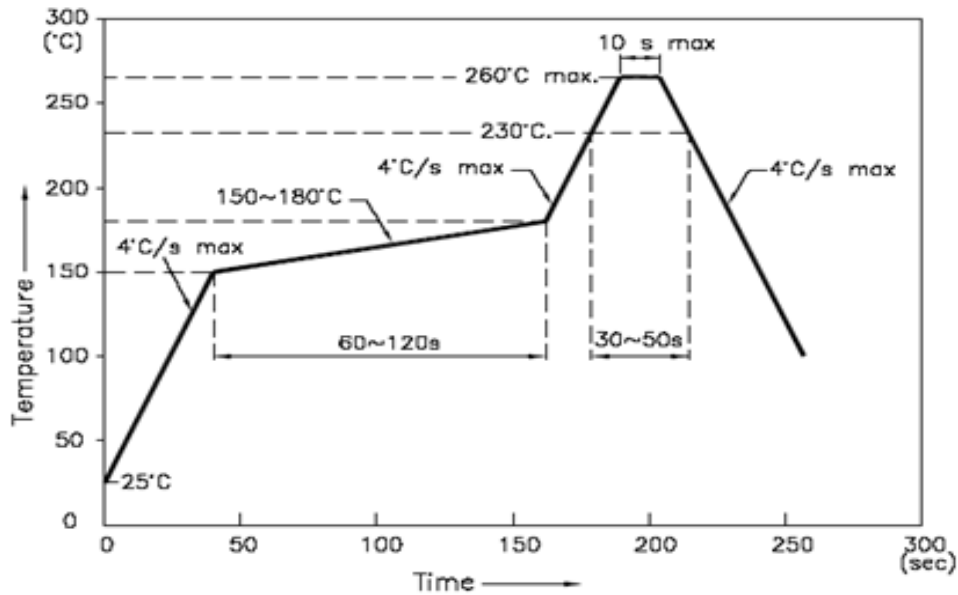
Rank	Chromaticity coordinates				
	C	X	0.29	0.29	0.32
Y		0.27	0.33	0.35	0.29
D	X	0.32	0.32	0.36	0.36
	Y	0.29	0.35	0.38	0.32

Characteristic Curves

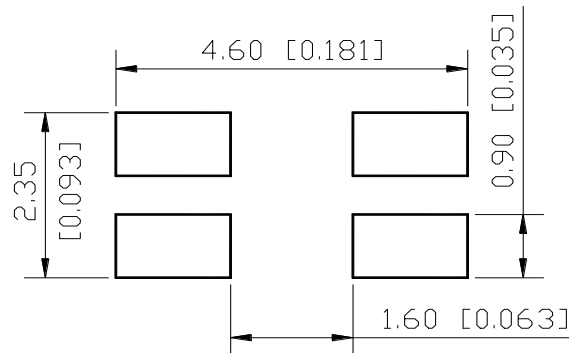


Solder Profile & Footprint

-The recommended reflow soldering profile is as follows (temperatures indicated are as measured on the surface of the LED resin):



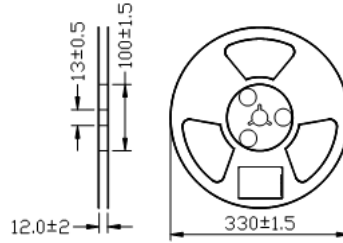
Recommended Pad Layout



Units: mm

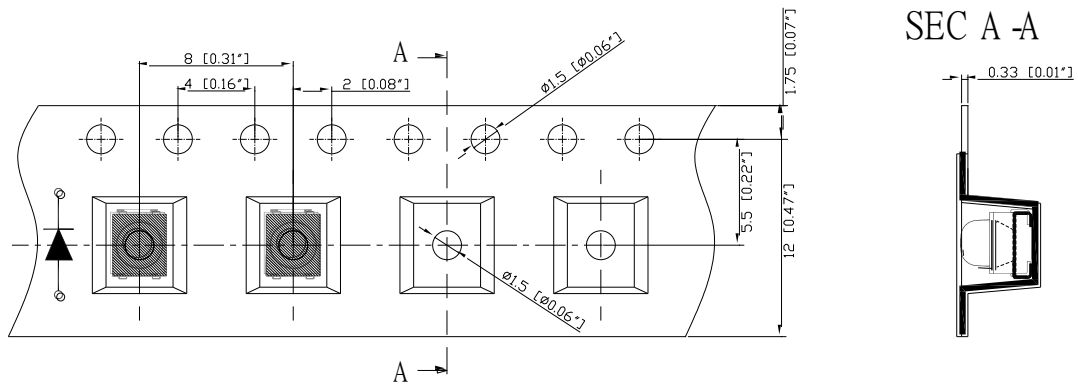
Packing

Reel Dimension:



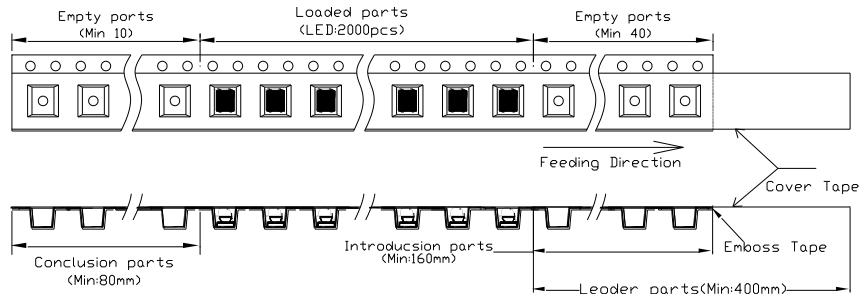
Unit: mm

Tape Dimension:



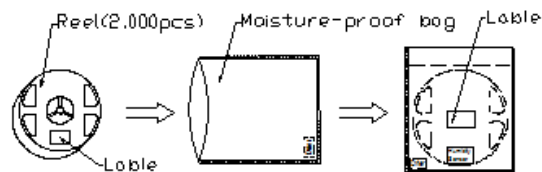
Unit: mm

Arrangement of Tape:



Unit: mm

Packaging Specifications:



Labeling



Part No: _____
Customer P/N: _____
Item: _____
Q'ty: _____
Vf: _____
Iv: _____
WI: _____
Date: _____

Made in China

Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP677AD-IWD-2897	Iv=26000mcd typ. @ I _f =50mA / CIE Coordinate: (X=0.32, Y=0.32) typ.	2,000 units



Revision History

Description:	Revision #	Revision Date
New Release of QBLP677AD-IWD-2897	V1.0	09/29/2025

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2. A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

Product: QBLP677AD-IWD-2897	Date: September 29, 2025	Page 10 of 10
	Version# 1.0	